RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _10/698,907_
Source: _TFWO_
Date Processed by STIC: _11-10-04_

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IFWO

RAW SEQUENCE LISTING   DATE: 11/10/2004
PATENT APPLICATION: **US/10/698,907**   TIME: 10:06:28

Input Set : **A:\21882-529-UTIL.txt**
Output Set: **N:\CRF4\11102004\J698907.raw**

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 3 <110> APPLICANT: Frisen, Jonas
 4        Holmberg, Johan
 6 <120> TITLE OF INVENTION: Use of Ephrins and Related Molecules to Regulate Cellular
 7        Proliferation
 9 <130> FILE REFERENCE: 21882-529 UTIL
11 <140> CURRENT APPLICATION NUMBER: 10/698,907
12 <141> CURRENT FILING DATE: 2003-10-31
14 <150> PRIOR APPLICATION NUMBER: US 60/460,488
15 <151> PRIOR FILING DATE: 2003-04-03
17 <150> PRIOR APPLICATION NUMBER: US 10/291,290
18 <151> PRIOR FILING DATE: 2002-11-08
20 <150> PRIOR APPLICATION NUMBER: US 60/393,272
21 <151> PRIOR FILING DATE: 2002-07-02
23 <150> PRIOR APPLICATION NUMBER: US 60/345,206
24 <151> PRIOR FILING DATE: 2001-11-09
26 <160> NUMBER OF SEQ ID NOS: 25
28 <170> SOFTWARE: PatentIn version 3.2
30 <210> SEQ ID NO: 1
31 <211> LENGTH: 205
32 <212> TYPE: PRT
33 <213> ORGANISM: Mus musculus
35 <400> SEQUENCE: 1
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41 Ala Ala Asp Arg His Ile Val Phe Trp Asn Ser Ser Asn Pro Lys Phe
42              20                  25                  30
45 Arg Glu Glu Asp Tyr Thr Val His Val Gln Leu Asn Asp Tyr Leu Asp
46              35                  40                  45
49 Ile Ile Cys Pro His Tyr Glu Asp Asp Ser Val Ala Asp Ala Ala Met
50      50                  55                  60
53 Glu Arg Tyr Thr Leu Tyr Met Val Glu His Gln Glu Tyr Val Ala Cys
54 65                  70                  75                  80
57 Gln Pro Gln Ser Lys Asp Gln Val Arg Trp Asn Cys Asn Arg Pro Ser
58              85                  90                  95
61 Ala Lys His Gly Pro Glu Lys Leu Ser Val Lys Phe Gln Arg Phe Thr
62              100                 105                 110
65 Pro Phe Ile Leu Gly Lys Glu Phe Lys Glu Gly His Ser Tyr Tyr Tyr
66              115                 120                 125
69 Ile Ser Lys Pro Ile Tyr His Gln Glu Ser Gln Cys Leu Lys Leu Lys
70      130                 135                 140
73 Val Thr Val Asn Gly Lys Ile Thr His Asn Pro Gln Ala His Val Asn
74 145                 150                 155                 160
77 Pro Gln Glu Lys Arg Leu Gln Ala Asp Asp Pro Glu Val Gln Val Leu
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78              165              170              175
81 His Ser Ile Gly Tyr Ser Ala Ala Pro Arg Leu Phe Pro Leu Val Trp
82          180              185              190
85 Ala Val Leu Leu Leu Pro Leu Leu Leu Gln Ser Gln
86      195              200              205
89 <210> SEQ ID NO: 2
90 <211> LENGTH: 209
91 <212> TYPE: PRT
92 <213> ORGANISM: Mus musculus
94 <400> SEQUENCE: 2
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100 Pro Leu Arg Ala Arg Asn Glu Asp Pro Ala Arg Ala Asn Ala Asp Arg
101          20              25              30
104 Tyr Ala Val Tyr Trp Asn Arg Ser Asn Pro Arg Phe Gln Val Ser Ala
105      35              40              45
108 Val Gly Asp Gly Gly Gly Tyr Thr Val Glu Val Ser Ile Asn Asp Tyr
109   50              55              60
112 Leu Asp Ile Tyr Cys Pro His Tyr Gly Ala Pro Leu Pro Pro Ala Glu
113 65              70              75              80
116 Arg Met Glu Arg Tyr Ile Leu Tyr Met Val Asn Gly Glu Gly His Ala
117          85              90              95
120 Ser Cys Asp His Arg Gln Arg Gly Phe Lys Arg Trp Glu Cys Asn Arg
121          100              105              110
124 Pro Ala Ala Pro Gly Gly Pro Leu Lys Phe Ser Glu Lys Phe Gln Leu
125      115              120              125
128 Phe Thr Pro Phe Ser Leu Gly Phe Glu Phe Arg Pro Gly His Glu Tyr
129   130              135              140
132 Tyr Tyr Ile Ser Ala Thr Pro Pro Asn Leu Val Asp Arg Pro Cys Leu
133 145              150              155              160
136 Arg Leu Lys Val Tyr Val Arg Pro Thr Asn Glu Thr Leu Tyr Glu Ala
137          165              170              175
140 Pro Glu Pro Ile Phe Thr Ser Asn Ser Ser Cys Ser Gly Leu Gly Gly
141          180              185              190
144 Cys His Leu Phe Leu Thr Thr Val Pro Val Leu Trp Ser Leu Leu Gly
145      195              200              205
148 Ser
152 <210> SEQ ID NO: 3
153 <211> LENGTH: 230
154 <212> TYPE: PRT
155 <213> ORGANISM: Mus musculus
157 <400> SEQUENCE: 3
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160 1              5              10              15
163 Leu Leu Pro Leu Leu Ala Gln Gly Pro Gly Gly Ala Leu Gly Asn Arg
164          20              25              30
167 His Ala Val Tyr Trp Asn Ser Ser Asn Gln His Leu Arg Arg Glu Gly
168      35              40              45
171 Tyr Thr Val Gln Val Asn Val Asn Asp Tyr Leu Asp Ile Tyr Cys Pro
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Input Set : A:\21882-529-UTIL.txt
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172      50                   55                    60
175 His Tyr Asn Ser Ser Gly Pro Gly Gly Gly Ala Glu Gln Tyr Val Leu
176 65                   70                    75                    80
179 Tyr Met Val Asn Leu Ser Gly Tyr Arg Thr Cys Asn Ala Ser Gln Gly
180                  85                   90                    95
183 Ser Lys Arg Trp Glu Cys Asn Arg Gln His Ala Ser His Ser Pro Ile
184             100                  105                   110
187 Lys Phe Ser Glu Lys Phe Gln Arg Tyr Ser Ala Phe Ser Leu Gly Tyr
188             115                  120                   125
191 Glu Phe His Ala Gly Gln Glu Tyr Tyr Tyr Ile Ser Thr Pro Thr His
192         130                  135                   140
195 Asn Leu His Trp Lys Cys Leu Arg Met Lys Val Phe Val Cys Cys Ala
196 145                  150                   155                   160
199 Ser Thr Ser His Ser Gly Glu Lys Pro Val Pro Thr Leu Pro Gln Phe
200                  165                  170                   175
203 Thr Met Gly Pro Asn Val Lys Ile Asn Val Leu Glu Asp Phe Glu Gly
204             180                  185                   190
207 Glu Asn Pro Gln Val Pro Lys Leu Glu Lys Ser Ile Ser Gly Thr Ser
208         195                  200                   205
211 Pro Lys Arg Glu His Leu Pro Leu Ala Val Gly Ile Ala Phe Phe Leu
212     210                  215                   220
215 Met Thr Leu Leu Ala Ser
216 225                  230
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219 <210> SEQ ID NO: 4
220 <211> LENGTH: 206
221 <212> TYPE: PRT
222 <213> ORGANISM: Mus musculus
224 <400> SEQUENCE: 4

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226 Met Arg Leu Leu Pro Leu Leu Arg Thr Val Leu Trp Ala Ala Leu Leu
227 1                    5                    10                   15
230 Gly Ser Arg Leu Pro Gly Cys Ser Ser Leu Arg His Pro Ile Tyr Trp
231             20                   25                    30
234 Asn Ser Ser Asn Pro Arg Leu Leu Arg Gly Asp Ala Val Val Glu Leu
235         35                   40                    45
238 Gly Phe Asn Asp Tyr Leu Asp Ile Phe Cys Pro His Tyr Glu Ser Pro
239     50                   55                    60
242 Gly Pro Pro Glu Gly Pro Glu Thr Phe Ala Leu Tyr Met Val Asp Trp
243 65                   70                    75                    80
246 Ser Gly Tyr Glu Ala Cys Thr Ala Glu Gly Ala Asn Ala Phe Gln Arg
247             85                   90                    95
250 Trp Asn Cys Ser Met Pro Phe Ala Pro Phe Ser Pro Val Arg Phe Ser
251             100                  105                   110
254 Glu Lys Ile Gln Arg Tyr Thr Pro Phe Pro Leu Gly Phe Glu Phe Leu
255         115                  120                   125
258 Pro Gly Glu Thr Tyr Tyr Tyr Ile Ser Val Pro Thr Pro Glu Ser Pro
259     130                  135                   140
262 Gly Arg Cys Leu Arg Leu Gln Val Ser Val Cys Cys Lys Glu Ser Gly
263 145                  150                   155                   160
266 Ser Ser His Glu Ser Ala His Pro Val Gly Ser Pro Gly Glu Ser Gly
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PATENT APPLICATION: US/10/698,907   TIME: 10:06:28

Input Set : A:\21882-529-UTIL.txt
Output Set: N:\CRF4\11102004\J698907.raw

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267                   165            170            175
270 Thr Ser Gly Trp Arg Gly Gly His Ala Pro Ser Pro Leu Cys Leu Leu
271             180            185            190
274 Leu Leu Leu Leu Leu Pro Ile Leu Arg Leu Leu Arg Val Leu
275       195            200            205
278 <210> SEQ ID NO: 5
279 <211> LENGTH: 228
280 <212> TYPE: PRT
281 <213> ORGANISM: Mus musculus
283 <400> SEQUENCE: 5
285 Met Leu His Val Glu Met Leu Thr Leu Leu Phe Leu Val Leu Trp Met
286 1             5            10            15
289 Cys Val Phe Ser Gln Asp Pro Gly Ser Lys Val Val Ala Asp Arg Tyr
290             20            25            30
293 Ala Val Tyr Trp Asn Ser Ser Asn Pro Arg Phe Gln Arg Gly Asp Tyr
294             35            40            45
297 His Ile Asp Val Cys Ile Asn Asp Tyr Leu Asp Val Phe Cys Pro His
298       50            55            60
301 Tyr Glu Asp Ser Val Pro Glu Asp Lys Thr Glu Arg Tyr Val Leu Tyr
302 65            70            75            80
305 Met Val Asn Phe Asp Gly Tyr Ser Ala Cys Asp His Thr Ser Lys Gly
306             85            90            95
309 Phe Lys Arg Trp Glu Cys Asn Arg Pro His Ser Pro Asn Gly Pro Leu
310             100            105            110
313 Lys Phe Ser Glu Lys Phe Gln Leu Phe Thr Pro Phe Ser Leu Gly Phe
314       115            120            125
317 Glu Phe Arg Pro Gly Arg Glu Tyr Phe Tyr Ile Ser Ser Ala Ile Pro
318       130            135            140
321 Asp Asn Gly Arg Arg Ser Cys Leu Lys Leu Lys Val Phe Val Arg Pro
322 145            150            155            160
325 Thr Asn Ser Cys Met Lys Thr Ile Gly Val His Asp Arg Val Phe Asp
326             165            170            175
329 Val Asn Asp Lys Val Glu Asn Ser Leu Glu Pro Ala Asp Asp Thr Val
330             180            185            190
333 His Glu Ser Ala Glu Pro Ser Arg Gly Glu Asn Ala Ala Gln Thr Pro
334       195            200            205
337 Arg Ile Pro Ser Arg Leu Leu Ala Ile Leu Leu Phe Leu Leu Ala Met
338       210            215            220
341 Leu Leu Thr Leu
342 225
345 <210> SEQ ID NO: 6
346 <211> LENGTH: 345
347 <212> TYPE: PRT
348 <213> ORGANISM: Mus musculus
350 <400> SEQUENCE: 6
352 Met Ala Arg Pro Gly Gln Arg Trp Leu Ser Lys Trp Leu Val Ala Met
353 1             5            10            15
356 Val Val Leu Thr Leu Cys Arg Leu Ala Thr Pro Leu Ala Lys Asn Leu
357             20            25            30
```

```
360 Glu Pro Val Ser Trp Ser Ser Leu Asn Pro Lys Phe Leu Ser Gly Lys
361         35              40              45
364 Gly Leu Val Ile Tyr Pro Lys Ile Gly Asp Lys Leu Asp Ile Ile Cys
365         50              55              60
368 Pro Arg Ala Glu Ala Gly Arg Pro Tyr Glu Tyr Tyr Lys Leu Tyr Leu
369 65              70              75              80
372 Val Arg Pro Glu Gln Ala Ala Ala Cys Ser Thr Val Leu Asp Pro Asn
373                 85              90              95
376 Val Leu Val Thr Cys Asn Lys Pro His Gln Glu Ile Arg Phe Thr Ile
377         100             105             110
380 Lys Phe Gln Glu Phe Ser Pro Asn Tyr Met Gly Leu Glu Phe Lys Lys
381         115             120             125
384 Tyr His Asp Tyr Tyr Ile Thr Ser Thr Ser Asn Gly Ser Leu Glu Gly
385         130             135             140
388 Leu Glu Asn Arg Glu Gly Gly Val Cys Arg Thr Arg Thr Met Lys Ile
389 145             150             155             160
392 Val Met Lys Val Gly Gln Asp Pro Asn Ala Val Thr Pro Glu Gln Leu
393                 165             170             175
396 Thr Thr Ser Arg Pro Ser Lys Glu Ser Asp Asn Thr Val Lys Thr Ala
397         180             185             190
400 Thr Gln Ala Pro Gly Arg Gly Ser Gln Gly Asp Ser Asp Gly Lys His
401         195             200             205
404 Glu Thr Val Asn Gln Glu Glu Lys Ser Gly Pro Gly Ala Gly Gly Gly
405         210             215             220
408 Gly Ser Gly Asp Ser Asp Ser Phe Phe Asn Ser Lys Val Ala Leu Phe
409 225             230             235             240
412 Ala Ala Val Gly Ala Gly Cys Val Ile Phe Leu Leu Ile Ile Ile Phe
413             245             250             255
416 Leu Thr Val Leu Leu Leu Lys Leu Arg Lys Arg His Arg Lys His Thr
417         260             265             270
420 Gln Gln Arg Ala Ala Ala Leu Ser Leu Ser Thr Leu Ala Ser Pro Lys
421         275             280             285
424 Gly Gly Ser Gly Thr Ala Gly Thr Glu Pro Ser Asp Ile Ile Ile Pro
425     290             295             300
428 Leu Arg Thr Thr Glu Asn Asn Tyr Cys Pro His Tyr Glu Lys Val Ser
429 305             310             315             320
432 Gly Asp Tyr Gly His Pro Val Tyr Ile Val Gln Glu Met Pro Pro Gln
433             325             330             335
436 Ser Pro Ala Asn Ile Tyr Tyr Lys Val
437             340             345
440 <210> SEQ ID NO: 7
441 <211> LENGTH: 336
442 <212> TYPE: PRT
443 <213> ORGANISM: Mus musculus
445 <400> SEQUENCE: 7
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448 1               5               10              15
451 Gly Leu Leu Met Val Leu Cys Arg Thr Ala Ile Ser Arg Ser Ile Val
452         20              25              30
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 11/10/2004
PATENT APPLICATION: US/10/698,907   TIME: 10:06:29

Input Set : **A:\21882-529-UTIL.txt**
Output Set: **N:\CRF4\11102004\J698907.raw**

Invalid <213> Response:
Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:17

VERIFICATION SUMMARY
PATENT APPLICATION: US/10/698,907

DATE: 11/10/2004
TIME: 10:06:29

Input Set : A:\21882-529-UTIL.txt
Output Set: N:\CRF4\11102004\J698907.raw